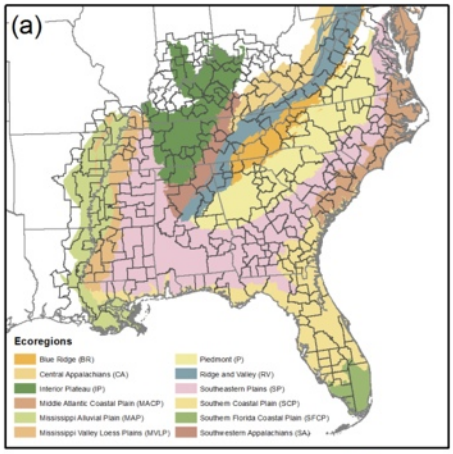
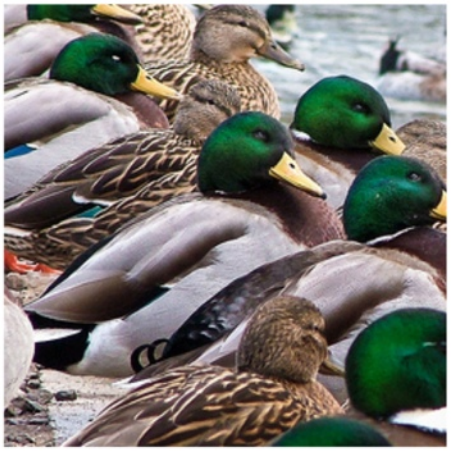
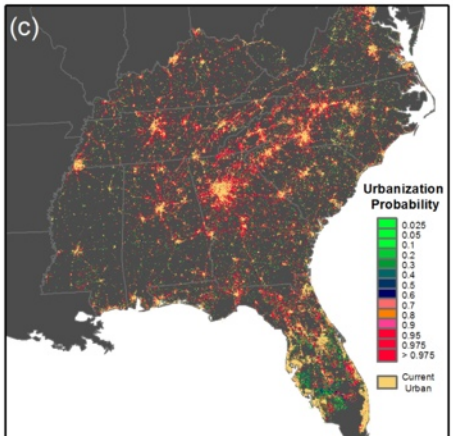
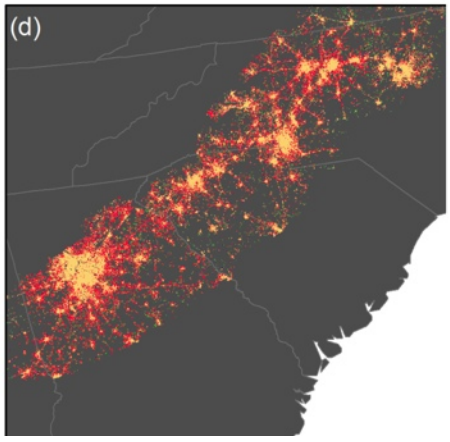
Southeast Conservation Adaptation Strategy
Progress Summary Report - Fall 2014

Presented to SEAFWA Directors; Tuesday Oct 22, 2014









SOUTH CENTRAL CLIMATE SCIENCE CENTER

LANDSCAPE CONSERVATION COOPERATIVES

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PHOTO & MAP CREDITS

Credits on Cover, clockwise from top left (courtesy of Flickr Creative Commons unless otherwise noted):

Black Skimmer - Whit Andrews; Black bear - Steve Hillebrand, USFWS (National Digital Library); *Villosa vibex* mussel - Jeff Powell, USFWS (GCPO LCC); Duck life (mallards) - Pete; Boy with catfish - Ron Jones; Set of 4 business-as-usual urbanization scenarios for the Southeast US (a, c & d shown) - Adam J. Terando et al., Plos One July 23, 2014; Downtown Atlanta - Peter Kaminski

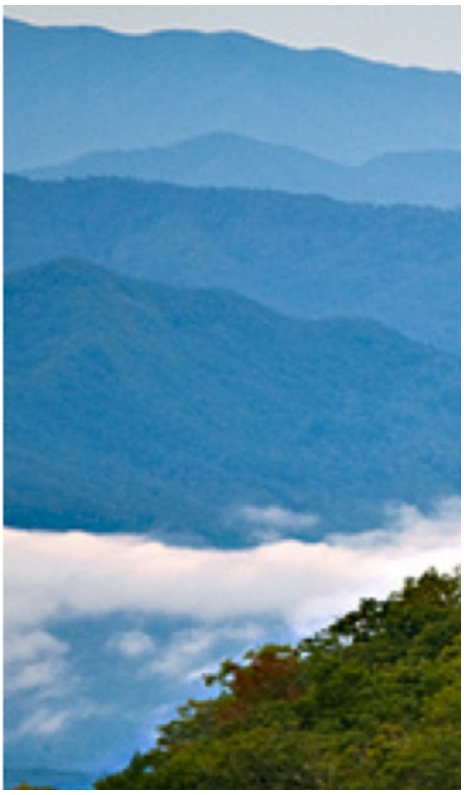
Photo/map credits in the report:

p. 1 (left to right) - Aerial of Chassahowitzka National Wildife Refuge, FL - USFWS; Rice harvesting in Fort Bend County, TX - USDA; Lower Mississippi River batture lands - Jan Hoover; Sue Cameron checks a data logger - G. Peeples, USFWS Southeast; Ozark hellbender - USFWS Midwest; Florida Panther NWR prescribed fire - Paul Stevko, USFWS Southeast.

p. 2 - Vulnerability to Sea Level Rise in the Southeast US - figure from the 2014 National Climate Assessment

p. 5 - Map showing combined SECAS blueprint, conservation estate and SLEUTH urbanization data for the Southeast, a work in progress - GCPO LCC, GCP LCC, and the USFWS Southeast Region GIS team





Background

Over sixty-eight years ago leaders of state fish and wildlife agencies across the southeast recognized the importance of coming together to share experiences, address common challenges, and identify opportunities to improve their ability to manage fish and wildlife populations within and across their jurisdictions. That spirit continues to grow and strengthen as state agency directors of the Southeastern Association of Fish & Wildlife Agencies (SEAFWA.org) harness the power of collaboration and leverage technical and financial resources to proactively pursue a more resilient landscape to perpetuate the fish and wildlife entrusted to their agencies. Those ideals are the cornerstone of their high-profile initiative called the Southeast Conservation Adaptation Strategy, or SECAS. The goal of this 5-year "project" is to deliver a first generation adaptation strategy for the southeast at the SEAFWA Conference in 2016. The expectation is that SECAS will better position the states, and the conservation community at large, to address the challenges of a rapidly changing world in the 21st century.



Magnitude of the Challenges

- The rapidly changing ecological, social, and financial landscapes are presenting unprecedented challenges to the agencies and organizations responsible for the future of fish, wildlife, and other natural resources.
  - The southeast United States grew in population 14.3% in the past decade, exceeding the national growth rate, and is expected to increase by more than 20% to 140,000,000 people by 2050.
  - Along with this population increase -- and likely impacts on fish and wildlife resources -- demographics and values are also changing (rural to metropolitan, aging populace, expanding Hispanic and Asian populations, etc.), which pose new challenges to natural resource managers in garnering support (financial, political, etc.) for conservation.
  - Other stressors on fish and wildlife resources include land use conversion for energy extraction (both non-renewable and renewable) to meet societal needs, increased demands for fresh water, and a changing climate - all of which will exacerbate many of the existing stresses to fish and wildlife.
- Many resource management challenges transcend political and jurisdictional boundaries.
- The goals and objectives for sustaining fish and wildlife exceed the operational reach of individual programs, agencies, and organizations.
- Complex management challenges are heightening the need for collaborative approaches to develop new techniques, to share resources and expertise, and to leverage capacities.
- Competition for resources will need to be replaced by a model of collaboration in developing and pursuing desired future conditions.

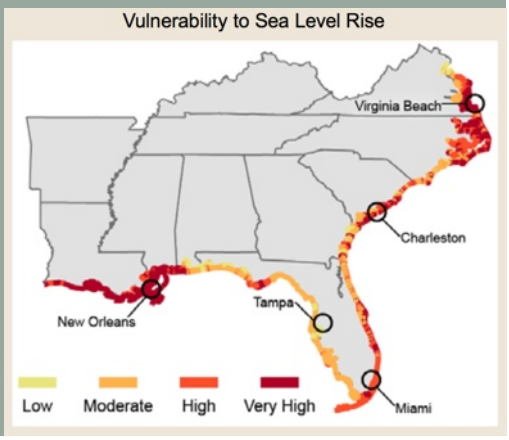
A Response Commensurate with the Challenges

Successfully developing a forward looking strategy across the southeast requires access to significant technical and collaboration capacity, leveraging of financial resources across partners, and ensuring opportunities for engagement among resource managers and scientists to:

- Forecast relevant future landscape scenarios (e.g., urban growth, species and habitat vulnerability, water resources);
- Integrate objectives across agencies and organizations into a compelling vision of the desired future state; and
- Develop and refine implementation strategies and tools that inform on-the-ground and policy-level management decision making.

To that end, SEAFWA state agencies:

- Garnered the support and capacity of the federal resource agencies of the Southeast Natural Resource Leaders Group (SENRLG), and each state and 12 federal organizations identified Point of Contracts, and
- Created an expectation that the highly technical and coordination capacities emerging in the Landscape Conservation Cooperatives (LCC) Network and Climate Science Centers (CSC) in the south be utilized as the private-state-federal partnership network "work-horses" to facilitate the development of the adaptation strategy.



Snapshot of SECAS Progress to Date

Since SEAFWA Directors initiated SECAS in 2011, hundreds of private, state, and federal organizations and thousands of individuals have engaged in the development of projects, processes, and tools that are forming the foundation of a Southeast Conservation Adaptation Strategy. The following include some highlights of progress being made by partners through the six southeastern LCCs and Climate Science Centers (CSC):

Progress Highlights

- *Connectivity for Climate Change* - Provides a template for how to reconnect landscapes in the southeastern U.S. to permit wildlife to adapt to a changing climate. http://globalchange.ncsu.edu/secsc/projects/connectivity-for-climate-change-in-the-southeastern-united-states;
- *Long-term Urbanization Scenarios* - Predicts future urban growth patterns and rates across the southeast. http://www.doi.gov/csc/southeast/news/new-report-predicts-creation-of-megalopolis-in-southeast-us.cfm;
- *Gulf Coast Vulnerability Assessment* – Assessing species and habitat vulnerability across the expansive area of the US coast along the Gulf of Mexico. http://gcpolccapps.org/projects/ProjectPage.aspx?id=248;
- *South Atlantic Conservation Blueprint* – Private, state, and federal organizations are developing a Vision for the SALCC geography. The SALCC Conservation Blueprint is a spatially-explicit, living plan that describes the places and actions needed to meet the Cooperative's shared conservation objectives in the face of future change. http://www.southatlanticlcc.org/page/conservation-blueprint;
- *Mottled Duck Habitat Decision Support Tool* – Habitat prioritization tools to guide actions based on expected improvement in mottled duck breeding success, while at the same time benefiting a dozen other grassland- and wetland-dependent species. This tool will also help partners throughout Texas and Louisiana advance a more unified approach to mottled duck conservation. http://gulfcoastprairielcc.org/science/science-projects/conserving-the-mottled-duck-in-louisiana-and-texas;
- *The Grassland Decision Support Tool & Pilot Projects* - Utilizing the best available geospatial data and consistent Landcover Data for Texas and Oklahoma to help identify and prioritize habitat areas to conserve for the benefit of species like Bobwhite Quail. http://gulfcoastprairielcc.org/science/science-projects/identifying-priority-grasslands-in-the-south-central-united-states;
- *Ozark Highlands Comprehensive Conservation Strategy* - Revision and integration of State Wildlife Action Plans to sustain fish and wildlife across the Ozarks. http://gcpolcc.org/profiles/blogs/aligning-state-wildlife-plans-and-strategies-in-the-ozark-highlan;
- *Predicting Waterfowl Fall-Winter Distributions into the Future* – Forecasting potential autumn-winter waterfowl migration from Canada into the northern and southern parts of the U.S based on how their current distributions are influenced by severity of winter, winter storms and degree of snowfall and accumulation. http://gcpolccapps.org/projects/ProjectPage.aspx?id=244;

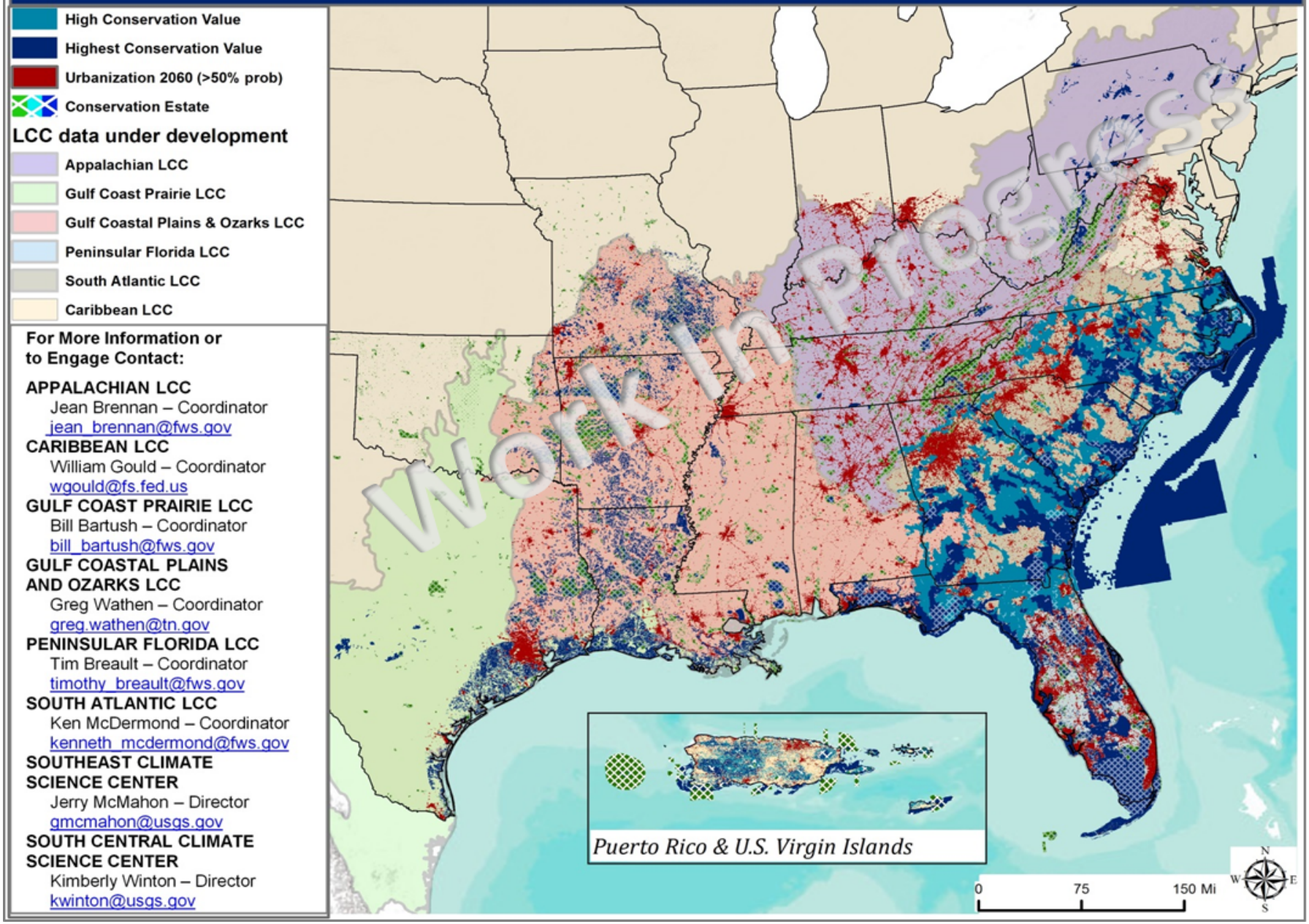
Progress Highlights continued

- *Seeing Common Ground and Data Sharing* - Developing consistent, seamless landcover data, shared via the Southeast Conservation Planning Atlas, and other habitat and wildlife information required to develop conservation designs that can be aligned for continuity across state borders. http://gcpolccapps.org/projects/ProjectPage.aspx?id=239 and http://seregion.databasin.org/;
- *"EL CAMPO"* - An electronic Atlas (maps) that will include spatially explicit data layers on resources, climate, conditions, infrastructure, governance, regulations, jurisdictions, species distributions, ownership, management, protected areas, populations, traditional knowledge, land uses, historical information, future scenarios, vulnerabilities, and opportunities in the Caribbean. https://griffingroups.com/blog/view/62270/el-campo-the-caribbean-atlas-for-management-planning-opportunities;
- *Florida Statewide Future Scenarios* - These include 1 meter of sea level rise, proactive and business-as-usual development strategies, and urbanization trends (31,000,000) by 2060. These scenarios vary the percentage of fee simple and conservation easement strategies. http://www.jem.gov/Modeling;
- Updates to the Critical Lands and Waters Identification Project (CLIP) databases - Including a number of new species models. http://fnai.org/clip.cfm;
- *Stream Classification Across the Appalachians* - River classification to develop and implement instream flow standards and management recommendations so that environmental flows can become integral to all water management decisions from the onset. http://applcc.org/research/aquatic-habitat-classification-group;
- *Understanding Land Use and Climate Change in the Appalachians* – A multi−scale vulnerability assessment that incorporates species−specific physiological data to identify habitats and species that would be most vulnerable to climate change in the LCC, especially range−limited/endemic species. http://applcc.org/research/climate-change-vulnerability-group/support-for-understanding-land-use-and-climate-change-in-the-appalachian-landscape;
- *Catalyzing a SE Coordinated Monitoring Network* – Developed an Eastern Avian Data Center that documents and supports a regional portal into the Avian Knowledge Network, designed by a steering committee with members from all overlapping Bird Habitat Joint Ventures as well as several states and NGOs. http://data.prbo.org/partners/eadc/;

A Peek Into The Future

While there remains a tremendous amount of work that needs to be accomplished to meet the Oct 2016 deadline, a map has been included with this briefing summary to visually demonstrate the significant progress being made across the southeast. However, it is imperative to note that this interim version of a developing southeast conservation blueprint is just that - A WORK IN PROGRESS. Partners and partnerships are still working within each LCC geography, and better coordination is beginning to emerge across LCC geographies to ensure the data and science underpinning these efforts can be stitched together in an ecologically meaningful way across the southeast. **It is also imperative to emphasize that each SEAFWA agency, SENRLG, and other partners be engaged in the development of SECAS through their respective LCC partnerships so that the final product delivered in Oct 2016 will reflect shared priorities representing the interests of the individual organizations involved**.

SECAS Conservation Blueprint 2060: Work in Progress



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